



# Project Fact Sheet

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## *Irrigation Scheduling for Trees and Vines*

### GOALS

- To investigate and demonstrate state-of-the-art techniques of plant, soil, and atmospheric based irrigation scheduling for orchard and vineyard crops.
- Obtain maximum growth and fruit yields.

### PROJECT DESCRIPTION

This project will demonstrate that continuous measurement of plant and soil water status can be incorporated by growers into irrigation scheduling regimes as stand-alone techniques or as a validation of atmospheric-based approaches. At the completion of this project the researcher expects the LVLT or truck diameter fluctuation technology to be ready for commercial use by innovative growers. Software system for the LVLT is not commercially available at present and needs to be developed.



**Vineyard in the Lodi-Woodbridge Wine Growing Region**

### BENEFITS TO CALIFORNIA

Potential energy efficiency benefits to be gained from this research are estimated to reach 1,200 million kilowatt hours per year, as a result of 10% reduction in water use.

### FUNDING AMOUNT

**California Energy Commission: \$125,010**

### PROJECT STATUS

- The project field work has been completed. The LVDT technology has a place in vine irrigation management but it is not to the point of defining an irrigation strategy based on maximum daily trunk shrinkage. The project continues to evaluate the collected field data before undertaking software development. A sensory and chemical evaluation of the wine produced will be completed.

### FOR MORE INFORMATION

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